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ABSTRACT

In this paper, one aspect of nonverbal behavior concomitant with verbalizations produced by mothers interacting with their young children is analyzed. The purpose is to examine the frequency and type of nonverbal cues accompanying verbalizations directed to the young child and to observe how these cues vary with the response of the child as well as with his or her linguistic sophistication. The paper is part of a larger study designed to specify the informational sources, clues to meaning, available to the child as he proceeds to learn language. The data examined in this paper are based on videotaped recordings of nine mother-child dyads. Three of the children were one-year-olds, three were two-year-olds, and three were three-year-olds. The gestures concomitant with one type of illocutionary act, the request for action, are focused on. The frequency and explicitness of the mother's concomitant gestures varied with the age and responsiveness of the child. It can be concluded from the study that the adult adopts certain nonverbal strategies, such as modeling and pointing, as an adjustment to the child's limited understanding of the meaning being conveyed in the utterances. (Author/CLK)

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Nonverbal Concomitants of Language to Children: Clues to Meaning*

Olga K. Garnica

Recently there has been increasing interest in the hypothesis that the verbal environment in which language is acquired by the young child may play a significant role in the language learning process itself. Numerous studies have shown that speech directed to the language learning child differs in systematic ways from speech directed to adolescents and adults (Snow, in press; Garnica, 1976, in press). It is suggested that the speech the young child hears, characterized by short and simple sentences, multiple repetitions, prosodic modifications, etc., may be useful to the child in developing an understanding of the precise relationship between meaning and linguistic expression within his language.

To date discussions have focused on strictly the verbal aspects of adult-child communication. The child, however, has a wider range of input available to him. In communicative situations, particularly conversational exchanges, the nonverbal aspects of the face-to-face interaction, e.g. gestures, may be an important source of cues to the speaker's intention. These features of the child's communicative environment have thus far not been studied.

In this paper I analyze one aspect of nonverbal behavior concomitant with verbalizations produced by mothers interacting with their young children. The purpose is to examine the frequency and type of nonverbal cues accompanying verbalizations directed to the young child and to observe how these cues vary with the response of the child as well as with his linguistic sophistication. The paper is part of a larger study designed to specify the informational sources--clues to meaning--available to the child as he proceeds to learn language (Garnica, forthcoming).

1. Method

The data examined in this paper is based on videotaped recordings of nine mother-child dyads. Three of the children were one year olds (19 mos., 18 Mos., 20 mos.), another three were two year olds (26 mos., 31 mos., 32 mos.) and the remaining three were three year olds (38 mos., 40 mos., 42 mos.).[1] The mother-child dyads were videotaped for fifteen minutes through a one-way mirrow while they were engaged in an unstructured play situation in a room well-equipped with books, puzzles and various toys. The nature of these interactions can be characterized in Goffman's (1963) terms as <u>focused interaction</u>, "instances of two or more participants in a situation joining each other openly in maintaining a single focus of cognitive and visual

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attention--what it sensed as a single mutual activity" (p. 89).

The speech and concomitant nonverbal behavior of both members of the dyad were transcribed. Speech was transcribed into ordinary orthography except for unintelligible utterances produced by the child. These were transcribed phonetically. The nonverbal behaviors were recorded using a system developed for the larger study.[2] Due to space limitations, the nonverbal portions of the examples are presented in this paper in the form of summary statements.

2. Requests for action

In this paper I discuss the gestures concomitant with one type of illocutionary act--the request for action (Searle 1969). The request for action (henceforth, RA) is one of a more general set of speech acts whereby one person attempts to influence the behavior (or attitude) of another. Specifically in the RA a speaker conveys to an addressee that he (the speaker) wishes the other (the addressee) to perform an act. The RA can be in direct or indirect form. In this paper only direct requests are considered. Indirect requests, including the children's responses, are considered elsewhere (Garnica, ms.). The speech produced by the mother was scanned for direct request forms.

The imperative form utterances were subjected to the simple test established by Garvey (1975), i.e. the imperative is prefaced with a perfo mative tag (I request, I command, I order you to) and judged for appropriateness in the particular context of the utterance. A total of 192 imperative utterances passed this test. The episodes which contained these utterances were then analyzed.

3. Nonverbal actions accompanying requests for action

Requests for action were directed approximately as frequently to all the children in the sample. The frequency and explicitness, however, of the mother's concomitant gestures varied with the age and responsiveness of the child. This can be seen quite clearly by comparing the following two examples from a one year old child and a three year old child:

(i) One year old child.

GENERAL CONTEXT: Child and mother sitting on floor. Child puts small wooden toys dolls into a toy car which is located between him and his mother.

Mother:	VERBAL	NONVERBAL
	Oh boy! That's terrific. Very good!	Mother claps hands.
	Can you push the car?	Mother points to car as she says "car".

Push the car.	Mother touches car and gives it a tap. Car moves slightly. Child watches, then looks to other side of room.
K_____. Watch.	Mother pushes car, turning it around so it is now in front of child and facing away from him. Child watches entire action of sequence.
Vroom. Vroom. Vroom. Vroom. (sound of car engine)	Mother pushes car in four jerky motions and returns it to the starting point.
Push the car.	Mother leans over and looks directly into the child's face.
Vroom. Vroom. Vroom.	No accompanying action by mother.
Push the car?	Mother looks directly at Child Child picks up another toy and examines it.
Push the car.	Mother pushes car in direction away from child and returnt it to starting position.
Vroom. Vroom. Vroom. Vroom.	Mother pushes car in four jerky motions and returns it to start position. Child picks up a toy and examines it.
You want to look at that?	Mother looks at toys in child's hand.
Okay	
(pause)	
Push the car.	Mother pushes car.

(ii) Three year old child.

GENERAL CONTEXT: Mother and child sitting on floor next to one another examining a puzzle which has pieces shaped like various vehicles (bus, ambulance, car, van, etc.). Each vehicle piece can be removed from board. Underneath each piece is a picture of the inside compartment of the vehicle.

VERBAL	NONVERBAL
Mother: Let's look at this puzzle.	Mother places puzzle in front of child.
Child: Puzzle.	
That's a puzzle.	
Puzzle.	
Mother: Yes,	Child looking at different parts of the puzzle.
Where's the bus?	
Where's but bus at?	
Can you pick up the bus?	
Pick up the bus.	
Pick up the bus.	

Child: Why?	Child looks at mother.
Mother: Let me see that bus.	
I want to see the bus up close.	
Pick up the bus.	
Oh. Look at the people on the bus.	Mother points to pictured person on the bus.
Can you pick up the bus?	
Pick up the bus.	
Child: There.	Child picks up bus piece and holds it up in front of mother's face.
Mother: Oh! Very good!	

These examples are representative of the data. Although both children received a large number of verbal renditions of the RA, the mother of the one year old presents many more nonverbal cues as to what is requested of the child. She quite explicitly models the action requested on six different occasions, i.e. puts the toy car into motion as she repeats the RA. This modelling begins almost immediately after the RA is verbally introduced.

The mother of the three year old refrains from any overt related gestural behaviors until the RA has been repeated many times. Even then, she only points to the object of the RA (rather than picking up the object). Her pointing gesture accompanies the utterance "Look at the people on the bus". She does not model the action requested nor does she indicate the object of the RA in conjunction with the direct request "Pick up the bus." The use of such more subtle or covert nonverbal cues to meaning is the predominant behavior in mother-child pairs involving three year olds. In fact there was only one case of a mother of a three year old performing the requested action simultaneously uttering the RA. The modelling occurred at the end of a long sequence of verbal renditions of the RA, a sequence not unlike the one in the three year old example given above.

There were two major types of adult nonverbal behavior accompanying RAs. One type involves the manipulation of an object (usually one of the toys). The other type only involves the two interactants. The first type is the most common accounting for almost all the RAs noted. For RAs involving objects the adults exhibited two classes of gestures: (1) pointing to the object(s) referred to in the RA, and (2) manipulating the object(s) referred to in a RA, the gesture may occur simultaneously with the production of the word for the object in question or non-simultaneously:

(iii) Two year old

GENERAL CONTEXT: Toy car and small dolls.

VERBAL	NONVERBAL
Mother: Put the people in the car.	Mother points to the two toy dolls when saying "people" and to car when saying "car".

(iv) One year old

GENERAL CONTEXT: Toy car and small dolls.

VERBAL	NONVERBAL
Mother: Push the car.	Mother points to car.

In the case where the adult manipulates an object or objects referred to in the RA, the gesture may also occur simultaneously or nonsimultaneously. Here, however, we see an added dimension. The adult performs the complete action or only some part of the action sequence. Examples of complete and partial actions in the simultaneous category are given below:

(v) One year old - complete action

GENERAL CONTEXT: Toy car and small dolls.

VERBAL	NONVERBAL
Mother: Push the car.	Mother pushes toy car.

(vi) Two year old - partial action

GENERAL CONTEXT: Child searching for pieces of puzzle.

VERBAL	NONVERBAL
Mother: Tip it [box] upside down.	Mother tips box half way and returns it to the upright position.
Maybe we will find the piece.	Child turns box with puzzle pieces upside down and all the pieces fall out.

Examples of complete and partial actions also occurred in the case of the nonsimultaneous category:

(vii) One year old - complete action

GENERAL CONTEXT: Toy doll and toy chair.

VERBAL	NONVERBAL
Mother: Look.	Adult puts doll in chair and takes doll out. Child watches. Adult points to doll.
Mother: Can you do it? Put the boy in the chair.	

(viii) Two year old - partial action

GENERAL CONTEXT: Toy merry-go-round which has two slots for riders.

VERBAL	NONVERBAL
	Adult puts merry-go-round in front of child. Positions two toy dolls around perimeter of merry-go-round.
Mother: Put the people in the merry-go-round and give them a ride.	

The second major type of adult nonverbal behavior accompanying RAs did not include objects but rather consisted of the adult herself performing the requested action as in (ix) below or of the adult physically manipulating the child into complying with the RA.

(ix) Two years old.

GENERAL CONTEXT: Child searching for missing piece of puzzle.

VERBAL	NONVERBAL
Mother: Look in the box and see if you can find it.	Mother leans over child's shoulder, facing the box referred to.

(x) One year old.

GENERAL CONTEXT: Mother introducing new activity to child.

VERBAL	NONVERBAL
Mother: Come sit next to me.	Mother holds child under his arms and moves child next to her.

The behavior in (ix) appeared consistently in all the episodes with the two and three year olds. The behavior exhibited in (x), i.e., actually physically handling the child, was restricted to the episodes with the one year olds. The other mothers used verbal means ("Come sit here and see what toys I have".) often combined with nonverbal features (e.g. Mother holds up toy with one hand and pats place on floor where she wants child to sit).

4. Concluding remarks

From the analysis of the mother-child interactions, we conclude that the adult adopts certain nonverbal strategies such as modelling, pointing, etc., as an adjustment to the child's limited understanding

of the meaning being conveyed in the utterances directed to him. Further investigation is necessary to determine whether these and other strategies produce a sufficiently rich environment which provides the child with specific information which could be used for testing his/her linguistic hypotheses. The lines of inquiry we are pursuing include a detailed analysis of the sequential patterns established on the adult-child interaction unit which includes RAs (direct and indirect), an examination of other types of speech acts and their concomitant nonverbal aspects, and an analysis of the effect of the type of child response (or lack of it) on the patterning of the mother's nonverbal behavior. With this type of information we can better assess the contribution of aspects of the total communicative environment to the language development of the child.

Footnotes

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1. The videotapes were selected for analysis randomly from a set of ten such pairs for each of the three age groups. This material forms the data base of the analysis presented in Garnica (ms., forthcoming).

2. Various parts of this system are still being revised and supplemented. The fully developed notation will appear in Garnica (forthcoming).

References

Garnica, O. K. 1975. *Some Prosodic Characteristics of Speech to Young Children.* Ph.D. dissertation, Stanford University.

Garnica, O. K. In press. Some prosodic and paralinguistic features of speech directed to young children. In C. A. Ferguson and C. Snow (eds.), *Talking to Children.* Cambridge University Press.

Garnica, O. K. Nonverbal concomitants of language input to children II: Indirect requests. ms.

Garnica, O. K. Forthcoming. *Adult-child discourse: the communicative environment of the language learning child.*

Garvey, C. Requests and responses in children's speech. *Journal of Child Language* 2.41-63.

Goffman, I. 1963. *Behavior in Public Places.* New York: Freeman Press.

Searle, J. 1969. *Speech Acts.* Cambridge: Cambridge University Press.

Snow, C. In press. Mothers' speech research: An overview. In C. A. Ferguson and C. Snow (eds.), *Talking to Children.* Cambridge University Press.